D.R. is an experienced writer who has published dozens of articles for various publications.

Racial differences in testosterone: Black men have highest, white men in the middle, Asian men have the least

23:06pm, 12th May 2017
533 words

Men from different racial and ethnic groups differ in the degree to which they suffer from prostate cancer. Researchers have hypothesized that differences in endogenous androgen levels may be at least partially behind this. To test this hypothesis, researchers gathered data on androgen serum concentrations and sex hormone-binding globulin (SHBG) in older men from 4 ethnic groups. African-Americans, Chinese, Japanese and Caucasian men were selected for the study

> "After adjustment for age and Quetelet's index, the levels of total and bioavailable testosterone were highest in Asian-Americans, intermediate in African-Americans, and lowest in whites. However, the DHT:testosterone ratio was highest in African-Americans, intermediate in whites, and lowest in Asian-Americans, corresponding to the respective incidence rates in these groups and providing indirect evidence for ethnic differences in 5alpha-reductase enzyme activity."

This study was conducted on older men. Another study conducted on young men found the same thing when comparing African-American and Caucasian men, with free testosterone being 21% higher in black males than white males and mean testosterone levels being 19% higher in black males:

> "Blacks in the United States have the highest prostate cancer rate in the world and nearly twice that of whites in the United States. The 2:1 black-to-white ratio in prostate cancer rates is already apparent at age 45 years, the age at which the earliest prostate cancer cases occur. This finding suggests that the factor(s) responsible for the difference in rates occurs, or first occurs, early in life. Testosterone has been hypothesized to play a role in the etiology of prostate cancer, because testosterone and its metabolite, dihydrotestosterone, are the principal trophic hormones that regulate growth and function of epithelial prostate tissue. This report gives the results of assays of circulating steroid hormone levels in white and black college students in Los Angeles, CA. **Mean testosterone levels in blacks were 19% higher than in whites, and free testosterone levels were 21% higher.** Both these differences were statistically significant. Adjustment by analysis of covariance for time of sampling, age, weight, alcohol use, cigarette smoking, and use of prescription drugs somewhat reduced the differences. After these adjustments were made, blacks had a 15% higher testosterone level and a 13% higher free testosterone level. A 15% difference in circulating testosterone levels could readily explain a twofold difference in prostate cancer risk."

Other interesting hormonal differences among the races have been found:

> In extending the follow-up to young men in Japan, Ross found to his surprise that their testosterone levels were similar to those of U.S. whites. But the study also suggested that the Japanese had lower activity of 5-alpha reductase than did U.S. whites and blacks. This enzyme metabolizes testosterone into dihydrotestosterone, or DHT, which is at least eight to 10 times more potent than testosterone (see sidebar). This finding, Ross said, is “very consistent with the role of androgens in prostate carcinogenesis and in explaining the racial/ethnic variations in risk.”
>
> The 5-alpha reductase type I1 gene is one of several that Ross's group is investigating for possible effects on testosterone secretion and metabolism and other androgen activity. He said they have found some forms of this gene that are unique to African-Americans and a few that are unique to Asian-Americans as well.

Reference links (in order of appearance):
https://www.tremr.com/duck-rabbit/posts/featured
https://www.ncbi.nlm.nih.gov/pubmed/8672990
https://www.ncbi.nlm.nih.gov/pubmed/3455741
https://academic.oup.com/jnci/article/89/3/188/2526672/why-do-african-american-men-suffer-more-prostate

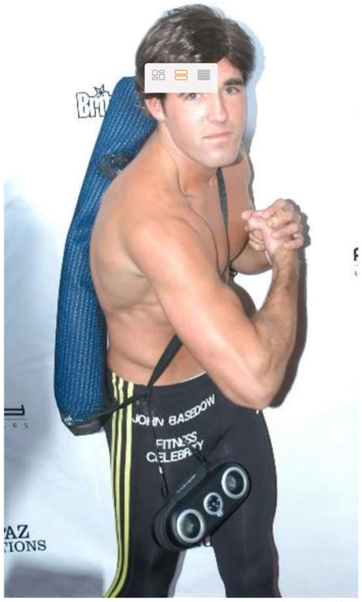
D.R. Follow
D.R. is an experienced writer who has published dozens of articles for various publications.

#Race, #Testosterone

Racial differences in testosterone: Black men have highest, white men in the middle, Asian men have the least

23:06pm, 12th May 2017
533 words, 1 image

4



By Credit to Lukeisback.com (permission statement at en:User:Tabercil/Luke Ford permission) (Lukeisback.com) [CC BY-SA 2.5 (http://creativecommons.org/licenses/by-sa/2.5)], via Wikimedia Commons

Men from different racial and ethnic groups differ in the degree to which they suffer from prostate cancer. Researchers have hypothesized that differences in endogenous androgen levels may be at least partially behind this. To test this hypothesis, researchers gathered data on androgen serum concentrations and sex hormone-binding globulin (SHBG) in older men from 4 ethnic groups. African-Americans, Chinese, Japanese and Caucasian men were selected for the study

> *"After adjustment for age and Quetelet's index, the levels of total and bioavailable testosterone were highest in Asian-Americans, intermediate in African-Americans, and lowest in whites. However, the DHT:testosterone ratio was highest in African-Americans, intermediate in whites, and lowest in Asian-Americans, corresponding to the respective incidence rates in these groups and providing indirect evidence for ethnic differences in 5alpha-reductase enzyme activity."*

This study was conducted on older men. Another study conducted on young men found the same thing when comparing African-American and Caucasian men, with free testosterone being 21% higher in black males than white males and mean testosterone levels being 19% higher in black males:

> *"Blacks in the United States have the highest prostate cancer rate in the world and nearly twice that of whites in the United States. The 2:1 black-to-white ratio in prostate cancer rates is already apparent at age 45 years, the age at which the earliest prostate cancer cases occur. This finding suggests that the factor(s) responsible for the difference in rates occurs, or first occurs, early in life. Testosterone has been hypothesized to play a role in the etiology of prostate cancer, because testosterone and its metabolite, dihydrotestosterone, are the principal trophic hormones that regulate growth and function of epithelial prostate tissue. This report gives the results of assays of circulating steroid hormone levels in white and black college students in Los Angeles, CA.* ***Mean testosterone levels in blacks were 19% higher than in whites, and free testosterone levels were 21% higher.*** *Both these differences were statistically significant. Adjustment by analysis of covariance for time of sampling, age, weight, alcohol use, cigarette smoking, and use of prescription drugs somewhat reduced the differences. After these adjustments were made, blacks had a 15% higher testosterone level and a 13% higher free testosterone level. A 15% difference in circulating testosterone levels could readily explain a twofold difference in prostate cancer risk."*

Other interesting hormonal differences among the races have been found:

> *In extending the follow-up to young men in Japan, Ross found to his surprise that their testosterone levels were similar to those of U.S. whites. But the study also suggested that the Japanese had lower activity of 5-alpha reductase than did U.S. whites and blacks. This enzyme metabolizes testosterone into dihydrotestosterone, or DHT, which is at least eight to 10 times more potent than testosterone (see sidebar). This finding, Ross said, is "very consistent with the role of androgens in prostate carcinogenesis and in explaining the racial/ethnic variations in risk."*
>
> *The 5-alpha reductase type I1 gene is one of several that Ross's group is investigating for possible effects on testosterone secretion and metabolism and other androgen activity. He said they have found some forms of this gene that are unique to African-Americans and a few that are unique to Asian-Americans as well.*

↳ Reply to D.R....

READ MORE...

Female hyenas are dominant because they...
#Sexism

How To Increase Your Testosterone Levels In 2018
#Health & Fitness

Is "race" real? Forensic anthropologists weigh in
#Race

Confronting Race in America...?

Race: is "breed" an appropriate analogy?
#Race

Correction:
#Journal